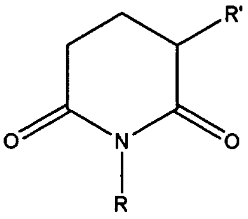
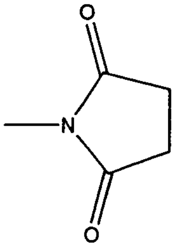
What is claimed is:

1. A method of treating inflammatory disease caused or exacerbated by increased activity of cyclooxygenase-2, comprising administering to a mammal in need thereof an effective amount of an amide or imide of the formula:



in which R is hydrogen, alkyl of 1 to 6 carbon atoms, alkenyl of 2 to 6 carbon atoms, morpholinomethyl, phenyl, or benzyl, and R' is:



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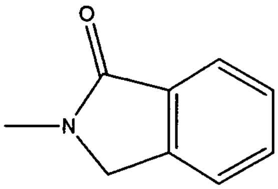

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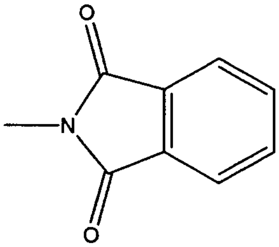
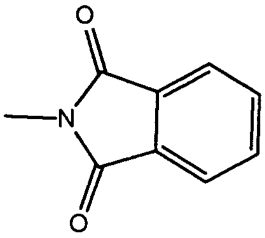


, such that prostaglandin biosynthesis is inhibited; with the proviso that wherein R is H, R' is not



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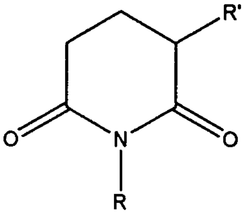
2. A method according to claim 1, wherein said amide or imide has an asymmetric center in substantially the (S) isomer.

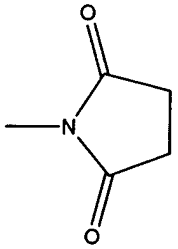
3. A method according to claim 1, wherein said amide or imide has an asymmetric center in substantially the (R) isomer.

4. A method according to claim 1, wherein said amide or imide has an asymmetric center in an unequal mixture of the (S) and (R) isomers.

5. A method of inhibiting angiogenesis caused or exacerbated by increased activity of cyclooxygenase-2, comprising administering to a mammal in need thereof an effective amount of an amide or imide of the formula:



in which R is hydrogen, alkyl of 1 to 6 carbon atoms, alkenyl of 2 to 6 carbon atoms, morpholinomethyl, phenyl, or benzyl, and R' is:



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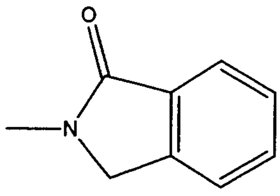

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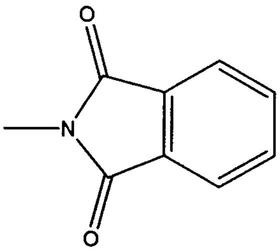
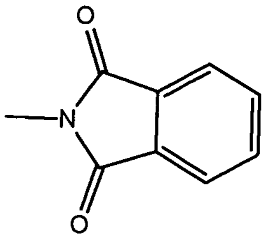


, such that prostaglandin biosynthesis is inhibited; with the proviso that wherein R is H, R' is not



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6. A method of inhibiting cell proliferation according to claim 5.

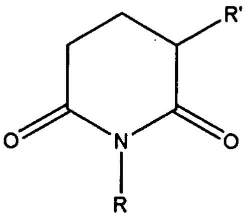
7. A method of inhibiting tumor growth according to claim 5.

8. A method according to claim 5, wherein said amide or imide has an asymmetric center in substantially the (S) isomer.

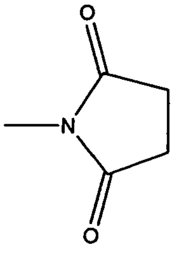
9. A method according to claim 5, wherein said amide or imide has an asymmetric center in substantially the (R) isomer.

10. A method according to claim 5, wherein said amide or imide has an asymmetric center in an unequal mixture of the (S) and (R) isomers.

11. A method of treating cancer caused or exacerbated by increased activity of cyclooxygenase-2, comprising administering to a mammal in need thereof an effective amount of an amide or imide of the formula:



in which R is hydrogen, alkyl of 1 to 6 carbon atoms, alkenyl of 2 to 6 carbon atoms, morpholinomethyl, phenyl, or benzyl, and R' is:



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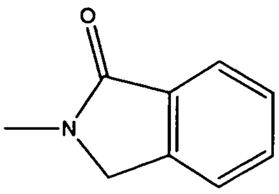

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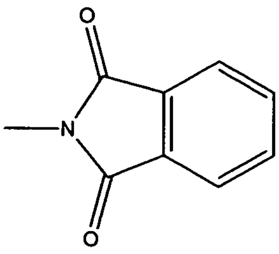
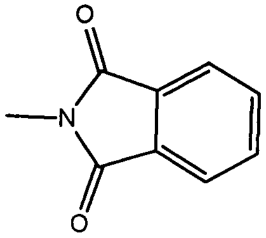


, such that prostaglandin biosynthesis is inhibited; with the proviso that wherein R is H, R' is not



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12. A method according to claim 11, wherein said cancer is selected from the group consisting of lung cancer, colorectal cancer, breast cancer, prostate cancer, bladder cancer, pancreatic cancer, ovarian cancer, leukemia, brain cancer, melanoma, lymphoma, erythroleukemia, uterine cancer and head and neck cancer.

13. A method according to claim 11, wherein said amide or imide has an asymmetric center in substantially the (S) isomer.

14. A method according to claim 11, wherein said amide or imide has an asymmetric center in substantially the (R) isomer.

15. A method according to claim 11, wherein said amide or imide has an asymmetric center in an unequal mixture of the (S) and (R) isomers.